

SECTION C - DESCRIPTION/SPECS/WORK STATEMENT

The Contractor shall furnish all labor, equipment, materials, transportation, supervision, and incidentals necessary to perform laboratory analyses of water quality samples collected. The contractor shall also be certified for all required analyses and participate in the EPA Region 8 water quality analysis certification program.

1. Analyses for general ambient water samples shall follow standard procedures as outlined in 40 CFR, Parts 136-141. Analytical methods for selected constituents are listed in SECTION B, (above).
  - a. The use of "special" equipment (e.g., auto-analyzer) not listed in 40 CFR shall be documented by the Contractor, and a listing shall be prepared of the analyses to be performed on the equipment. This information shall be submitted to the Government before work begins.
  - b. Required lower limit of detection for each parameter in general ambient water samples is as follows (units are in mg/l unless stated otherwise):

CATEGORY I		CATEGORIES III & IV		CATEGORY V	
Bicarbonate	1.0	Aluminum	0.05	Nitrogen (ammonia)	0.1
Carbonate	1.0	Antimony	0.003	Nitrogen (Kjeldhal)	0.5
Chloride	1.0	Arsenic	0.001	Nitrogen (nitrate & nitrite)	0.05
Fluoride	0.1	Barium	0.005	Phosphorus (total)	0.01
	0.1	Beryllium	0.001	Phosphorus (ortho)	0.01
	1.0	Boron	0.1	CATEGORY VI	
	0.05				
Calcium	1.0	Cadmium	0.0001	Oil and Grease (sulfur corrected)	5.0
Magnesium	1.0	Chromium	0.001	Total Petroleum Hydrocarbons	0.1
Potassium	1.0	Copper	0.001		
Sodi	1.0	Cyanide	0.005		
Silica	1.0				
Conductivity	1 uMHOS /cm	Iron	0.03		
Total Dissolved Solids	5.0	Lead	0.002		
Total Hardness as CaCO <sub>3</sub>	10.0	Manganese	0.01		
Total Alkalinity as CaCO <sub>3</sub>	1.0	Mercury	0.0001		
pH (tenths)	0.01 su	Nickel	0.01		
CATEGORY II		Selenium	0.001		
Total Suspended Sediments	5.0	Silver	0.0005		
Total Dissolved Solids	5.0	Zinc	0.01		
		Thallium	0.001		

- 2 Analyses for drinking water samples shall follow standard procedures as outlined in 40 CFR, Parts 136-141 Subpart C. Analytical methods for selected constituents are listed in SECTION B(above).
  - a Required lower limit of detection for each parameter in drinking water samples is as follows (units are in mg/l unless stated otherwise):

	0.01
	0.002
	NTUs
	presence/ absence

- 3 The EPA method 1664 shall be used for analysis of oil and grease and shall, in addition, employ the Wyoming approved modification for removing sulfur (contained herein).
4. Although the Field Offices submitting samples for analysis will typically do

so indicating the requested analysis on a Category basis (e.g., I, III, and IV), the Government will, as necessary, exercise the option of identifying the requested analysis on an individual constituent basis, (i.e., constituents selected from multiple categories, e.g., Ca+Mg+Na+Al+Cu+Se rather than the full suite analysis of Categories I and III). Therefore, the Contractor shall indicate in his bid submission unit prices for individual analysis of constituents.

- 5 The Contractor shall furnish sample preservatives, bottles and containers unless required otherwise by the originating BLM office.
- 6 The Contractor shall filter or preserve samples on receipt at the laboratory as appropriate, if the service is specifically requested.
- 7 The Contractor shall be responsible for all transportation costs for preservatives and for bottles and containers sent to and returned from the Government unless samples can be hand carried to the lab by the Government. If Government sampling bottles and containers are provided the Contractor shall be responsible for returning all sample bottles and shipping containers, other than cardboard boxes, to the originating office. The Contractor may be held liable for loss, damage, or destruction of these items and replacement costs shall be deducted from any payment due.

Minimum sample volumes, sample containers, and sample preservation procedures shall be as described in the Attachment, Table 1.

High priority samples are those general ambient water samples needing analysis results delivered to the originating office within 72 hours of receipt of the samples by the testing lab. Rush samples are those drinking water samples for which analysis must be initiated within 8 hours of the sample being collected in the field with results delivered to the originating office within 28 hours of receipt of the sample by the testing lab. In the event of a positive test for Total or Fecal Coliforms the Contractor shall contact the originating office by telephone within (2) hours of obtaining the analysis results.

10. For high priority and or rush samples, the originating Government office shall notify the Contractor by phone as soon as samples are shipped or as soon as the Contractor's office is open if samples are shipped on a weekend or holiday.
11. The Contractor shall submit laboratory results for high priority and or rush samples by fax or e-mail to the appropriate originating office within the time frames stated in Part 9 above. Paper copies of results for high priority and or rush samples shall be submitted to the originating office postmarked within 5 working days of obtaining sample analysis results.
12. Excluding high priority and/or rush samples, the Contractor shall:
  - a. Submit general ambient water sample analysis results, in paper copy and in an ACCESS database format, to the appropriate originating office. Hard copy results shall be postmarked within 14 calendar days after receipt of the sample. An ACCESS version of the analysis results shall be posted to the lab's website within 14 calendar days of receipt of the sample. The format of the ACCESS version shall be compatible with the Government's ACCESS water resources database.
  - b. Submit drinking water sample analysis results, in paper copy and in an ACCESS database format, to the appropriate originating office. Hard copy results shall be postmarked within 10 work days after receipt of the sample. An ACCESS version of the analysis results shall be posted to the lab's website within 10 work days of receipt of the sample. The format of the ACCESS version shall be compatible with the Government's ACCESS water resources database.
- 13 In addition to the invoice information the contractor must also submit lab sheets (quality assurance documentation) to the BLM Project Inspectors upon their request.
14. The Contractor shall provide a report of the anion/cation and TDS balance for each sample and a written explanation of reason(s) for deviation of anion/cation balance greater than 5 percent, or a TDS balance greater than 20%. Also, the Contractor shall provide a written narrative on the back of

the laboratory form of any unique finding(s) that might occur during sample analysis (e.g., evidence of improper shipping and handling, incorrect sample preservation, etc.)

15. The Contractor shall also note on the back of the laboratory form if samples received were damaged in transit. If damage is significant, the Contractor shall immediately contact the appropriate Field Representative(s) to determine if re-sampling is required.
16. All samples shall be preserved and stored under refrigeration until the laboratory reports have been reviewed and tests approved. The Field Representative(s) will then notify the laboratory that samples may be destroyed.
17. The Contractor shall provide each Field Office with all their data from the entire year on a CD-ROM, including analysis results and field observations (i.e., field observations and measurements when such information is provided with field samples), in an ACCESS database format. The format of the ACCESS dataset shall be compatible with the Government's ACCESS water resources database. Also, a CD-ROM containing the entire data files for that year's sampling from all Field Offices as described above shall be provided to the Contracting Officer's Representative (COR). These products must be delivered within 30 days of termination of the contract. Final payment will not be made until this information is received by the Government.
18. The Contractor shall certify that laboratory personnel meet the minimum skill requirements as outlined in Environmental Protection Agency's "1997 Manual for Certification of Laboratories Analyzing Drinking Water, Chapters 3 & 4." The Contractor shall submit with his bid proposal a list of personnel qualifications and a brief description of duties to assure that minimum skill requirements referenced above are acceptable.
19. All analyses shall be supervised by a chemist with a minimum of a BS degree in water chemistry or by an individual with an equivalent mix of education and experience.
20. During the course of the contract, the Government may request that the Contractor make its facilities, calculations, data, quality control records (i.e., reagent preparation, standardization, grade, changes in reagent and/or equipment use, etc.,) laboratory techniques, and other pertinent information open for review.
21. Throughout the duration of the contract, unannounced or blind performance check samples may be submitted to the laboratory for those parameters associated with this contract. In addition, occasional duplicate samples will be sent to the Contractor and to other laboratories for comparison of results. Deficiencies identified through the audit samples must be corrected before the Government will pay for the laboratory analyses or accept the results.
22. Due to the time critical nature regarding the delivery of sampling supplies to BLM Field Offices, performance of initial and repeat sample analysis, and reporting of analysis results, it is the desire of the U.S. Government that the laboratory is within 400 miles or approximately 5 hours of driving time to BLM Field Offices so that service may be obtained within a matter of hours.

#### SECTION D - Packaging and Marking

##### 1 Packaging

Preservation, packaging, and packaging for shipment or mailing of all work deliverable hereunder shall be in accordance with the good commercial practice and adequate to insure acceptance by common carrier and safe transportation at the most economical rates. The Contractor shall provide prepaid mailing labels or other means of paying for shipping costs of these deliverables to and from the originating BLM Field Offices.

##### Marking

- a Each package, report, or other deliverable shall be accompanied by a letter or other document which:

1. Identifies the order number under which the item is being delivered.
  2. Identifies the Line Item Number or Report Requirement which requires the delivered item(s).
  3. Indicates whether the Contractor considers the delivered item to be a partial or full satisfaction of BLM's order.
- b. Correspondence and any associated documentation shall be simultaneously delivered to the originating Field Office and the Contracting Officer's Representative.

### 3 Delivery of Laboratory Reports

- a. Packaging, and marking for shipment of all laboratory reports (results) shall be in accordance with standard commercial practice and shall be acceptable by common carrier, ensuring safe arrival at destination(s).
- b. The Contractor shall be responsible for any/all damage to reports

## SECTION E - TERMS, SUBMISSION OF RESULTS

### 1. TERM OF CONTRACT

- a. The Contractor shall be required to (a) commence work under this contract within ten (10) calendar days after the date the Contractor receives the written notice to proceed.
- b. Work orders will be issued by BLM PIs under this contract from September 15, 2005 to proceed on through September 14, 2006. Additional "Option 1" language for extension to January 31, 2007. All work ordered under this contract shall be completed by the Contractor no later than 30 days after the expiration of the order.

### 2. SUBMITTAL OF LABORATORY RESULTS

- a. Laboratory results shall be submitted (FOB Destination) to the appropriate ordering office. Each shipment must evidence date of shipment.
  1. Unless otherwise directed, all laboratory results shall be delivered in the manner and within time frames outlined in Sections C and D.
- b. If data is not recorded accurately on data files and on paper copies, payment will be withheld until the discrepancies are corrected by the Contractor.

## SECTION F - CONTRACT ADMINISTRATION DATA

### 1. Procurement Office Representative

The Contracting Officer for this requirement is:

Doug Hargrove  
P.O. Box 1828  
5353 Yellowstone Road  
Cheyenne, WY 82009

### 2. Contracting Officer's Representative (COR) and Project Inspector (PI)

- a. The COR will be appointed in writing by the Contracting Officer at the time of contract award. The Contractor will receive a copy of the written appointment which defines the COR's responsibilities and limited authority.
- b. The Contracting Officer shall also designate employees to provide inspection of the services performed under this contract. Such Project Inspectors (PIs), as well as the COR, will be responsible for giving the Contractor any special technical instructions necessary to complete performance in an orderly manner.
- c. Neither the COR nor the PIs have the authority to modify, or in any way amend, the terms of this contract.

### 3 Ordering Offices

The following BLM Wyoming Field Offices will submit water samples to the

Contractor for laboratory analysis

Worland Field Office

101 South 23<sup>rd</sup> Street  
P.O. Box 119  
Worland, Wyoming 82401

Cody Field Office

1002 Blackburn  
P.O. Box 518  
Cody, Wyoming 82414

Rawlins Field Office

P.O. Box 2407  
1300 North Third Street  
Rawlins, Wyoming 82301

Rock Springs Field Office (also serving Kemmerer and Pinedale Field Offices)

280 Highway 191 N.  
Rock Springs, WY 82901

Lander Field Office

1335 Main Street  
P.O. Box 589  
Lander, Wyoming 82520

Casper Field Office (also serving Newcastle Field Office)

2987 Prospector Drive  
Casper, Wyoming 82834

Buffalo Field Office

3425 Fort Street  
Buffalo, Wyoming 82834

Invoice Requirements

- a. Notifications of completed analysis (titled Work Order Notice) shall be sent to each PI and to the COR for each individual batch of analysis requested by a PI. The Work Order Notices shall be included with the sample analysis reports. The Work Order Notice shall include:
  - name/Field Office of the requesting PI;
  - Sample Identification (name or number assigned by the PI);
  - Work Order Number assigned by the lab;
  - lab number assigned to track each Category of analysis (or group of individual constituents analyzed);
  - identification of the Categories of analysis requested (or group of individual constituents requested);
  - incremental prices for the Categories (or groups of constituents);
  - and, total cost.
- b. An ORIGINAL Monthly invoice shall be submitted to the COR. The Monthly Invoice will serve as a request for payment. Each monthly invoice shall consolidate and summarize all the Work Order Notices processed during that month. Monthly invoices shall include:
  - a list of Work Order Numbers being invoiced;
  - identification of the Categories (or groups of constituents) of analysis performed;
  - incremental prices for the Categories (or groups of constituents);
  - and, total cost.
- c. Monthly Invoices shall be submitted to the COR at the following address:

P.O. Box 1828  
5353 Yellowstone Road  
Cheyenne, WY 82009

**ATTACHMENT: Table 1, Sampling and Preservation of Waters**

<i>Measurement</i>	<i>Vol. Req. (mL)</i>	<i>Container P=Plastic G=Glass</i>	<i>Preservative</i>	<i>Holding Time</i>
<i>Major Minerals including: Potassium, Sodium, Calcium, Magnesium, Sulfate, Chloride, Bicarbonate, Carbonate, pH, Specific Conductance, Total Dissolved Solids</i>	500	P or G	Cool, 4°C	See holding times for each individual parameter, below
<b><i>METALS</i></b>				
Dissolved Metals	250	P or G	Filter (0.45 micron), then add HNO <sub>3</sub> to pH < 2	6 months
Total Metals	250	P or G	HNO <sub>3</sub> to pH < 2	6 months
	200	P or G	Cool, 4°C	24 hours
Ferrous Iron	100	P or G	3m/HCL/100 mL, no headspace, Cool, 4°C	24 hours
Mercury	100	P or G	Same as Total or Dissolved metals	28 days
<b><i>NON-METALLICS</i></b>				
Acidity	100	P or G	Cool, 4°C	14 days
Alkalinity	100	P or G	Cool, 4°C	14 days
BOD - Biochemical Oxygen Demand	1000	P or G	Cool, 4°C	48 days
Bromide	100	P or G	None Required	28 days
COD - Chemical Oxygen Demand	50	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	14 days
Chloride	50	P or G	None Required	28 days
Chlorine	50	P or G	None Required	Analyze Immediately
Color	50	P or G	Cool, 4°C	
Conductance	100	P or G	Cool, 4°C	28 days

**ATTACHMENT: Table 1, Sampling and Preservation of Waters**

<b>NON-METALLICS (continued)</b>				
Cyanides	500	P or G	NaOH to pH > 12, Cool, 4°C	14 days
Ethylene Glycol	500	P or G	Cool, 4°C	
Formaldehyde	100	P or G	Cool, 4°C	
Fluoride	50	P or G	None Required	28 days
Iodide	100	P or G	Cool, 4°C	24 hours
Hardness	100	P or G	Cool, 4°C	6 months
Nitrogen, Ammonia	50	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Nitrogen, Total Kjeldahl	500	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Nitrogen, Nitrate plus Nitrite	50	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Nitrogen, Nitrate	50	P or G	Cool, 4°C	48 hours
Nitrogen, Nitrite	50	P or G	Cool, 4°C	48 hours
Oil and Grease	1000	G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Organic Carbon	25	G	H <sub>2</sub> SO <sub>4</sub> or HCl to pH < 2, Cool, 4°C	28 days
pH	25	P or G	None Required	Analyze Immediately
Phenolics	50	G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Phosphorus, Hydrolyzable	250	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Phosphorus, Ortho	250	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days (preserved) 48 hours (unpreserved)
Phosphorus, Total	250	P or G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Silica	100	P	Cool, 4°C	28 days
TDS - Filterable Residue	100	P or G	Cool, 4°C	7 days
TSS - Non-filterable Residue	100	P or G	Cool, 4°C	7 days
Residue, Total	100	P or G	Cool, 4°C	7 days
Residue, Volatile	100	P or G	Cool, 4°C	7 days
Settleable Matter	1000	P or G	Cool, 4°C	48 hours
Sulfate	100	P or G	Cool, 4°C	28 days
Sulfide	250	P or G	Add 2 ml, zinc acetate, zero headspace, NaOH to pH > 9, Cool, 4°C	7 days
Sulfite	50	P or G	None Required	Analyze Immediately
Surfactants	500	P or G	Cool, 4°C	48 hours
Thiocyanates	100	P or G	None Required	
TPH - Total Petro Hydrocarbons	1000	G	H <sub>2</sub> SO <sub>4</sub> to pH < 2, Cool, 4°C	28 days
Turbidity	100	P or G	Cool, 4°C	48 hours

**ATTACHMENT: Table 1, Sampling and Preservation of Waters**

<b>BACTERIA</b>				
Total Coliform Bacteria	120	Sterile	Cool, 4°C	48 hours
Fecal Coliform Bacteria	120	Sterile	Cool, 4°C	8 hours
Heterotrophic Plate Count	120	Sterile	Cool, 4°C	24 hours
Sulfate Reducing Bacteria	120	Sterile	Cool, 4°C	48 hours

<b>RADIOCHEMISTRY</b>				
Gross Alpha	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
Gross Beta	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
<sup>210</sup> Pb	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
<sup>210</sup> Polonium	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
<sup>222</sup> Radon	2-VOA vials with zero headspace	G	Cool, 4°C	4 days
<sup>226</sup> Radium	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
<sup>228</sup> Radium	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
<sup>230</sup> Thorium	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months
<sup>Nat</sup> Uranium	1000	P or G	HNO <sub>3</sub> to pH < 2	6 months



## SECTION B - SUPPLIES/SERVICES AND PRICES OR COSTS

GENERAL AMBIENT WATER QUALITY ANALYSIS

<u>0001</u>	<u>CATEGORY I ANALYSIS, DISSOLVED</u>	Estimated Quantity	Analytical Method	Unit Price (each)	Total Price for Quantities
0001A	Bicarbonate	330	A2320 B	-	-
0001B	Carbonate	330	A2320 B	-	-
0001C	Chloride	330	A4500 C1B-E200.7	\$4.50	\$1485.00
0001D	Fluoride	330	A4500 F-C	\$3.00	\$990.00
0001E	Sulfate	330	A4500 SO4-E- E200.7	\$4.50	\$1485.00
0001F	Calcium	330	E200.7	\$4.00	\$1320.00
0001G	Magnesium	330	E200.7	\$4.00	\$1320.00
0001H	Potassium	330	E200.7	\$4.00	\$1320.00
0001I	Sodium	330	E200.7	\$4.00	\$1320.00
0001J	Silica	330	E200.7	\$4.00	\$1320.00
0001K	Calculated anion/cation balance	330	Calculation	-	
0001L	Conductivity	330	A2510 B	\$3.00	\$990.00
0001M	Total Dissolved Solids (Calculated)	330	Calculation	-	
0001N	Total Dissolved Solids, analyzed @180°C	330	A2540 C	\$7.50	\$2475.00
0001O	Total Hardness as CaCO3	330	Calculation	-	
0001P	Total Alkalinity as CaCO3	330	A2320 B	\$3.00	\$990.00
0001Q	pH	330	A4500 H B	\$3.00	\$990.00
0001R	Sodium Absorption Ratio	330	Calculation	-	
Subtotal					\$16005.00
<u>0002</u>	<u>CATEGORY II ANALYSIS</u>				
0002A	Total Suspended Sediment	20	E160.2	\$11	\$220.00
0002B	Total Dissolved Solids, analyzed @180°C	20	A2540 C	\$11	\$220.00
Subtotal					\$440.00
<u>0003</u>	<u>CATEGORY III ANALYSIS, DISSOLVED</u>				
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
0003D	Boron	330	E200.7	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
0003J	Copper	330	E200.8	\$3.00	\$990

<u>CATEGORY III ANALYSIS, DISSOLVED (continued)</u>		Estimated Quantity	Analytical Method	Unit Price (each)	Total Price for Quantities
0003K	Iron	330	E200.7	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
		330	E200.8	\$3.00	\$990
				Subtotal	\$14850.00
0004	<u>CATEGORY IV ANALYSIS, TOTAL</u>				
0004A	Sample Digestion	10	E200.2	\$5.00	\$50.00
0004B	Aluminum	10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E335.3	\$15.00	\$150.00
0004K	Iron	10	E200.7	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
		10	E200.8	\$3.00	\$30.00
				Subtotal	\$590.00
0005	<u>CATEGORY V ANALYSIS, NUTRIENTS</u>				
		5	A4500 NH3 H	\$5.00	\$25.00
0005B	Nitrogen (Kjeldhal)	5	A4500 N org	\$13.50	\$67.50
0005C	Nitrogen (nitrate and nitrite)	5	E353.2	\$5.00	\$25.00
0005D	Phosphorus (total)	5	E365.1	\$10.50	\$52.50
0005E	Phosphorus (ortho)	5	E365.1	\$10.50	\$52.50
				Subtotal	\$222.50
0006	<u>CATEGORY VI ANALYSIS, HYDROCARBONS</u>				
0006A	Oil and Grease (sulfur corrected)	4	E1664-Cu	\$24.00	\$96.00
0006B	Total Petroleum Hydrocarbons	4	E418.1	\$38.50	\$154.00
				Subtotal	\$250.00
0007	<u>CATEGORY VII</u>				
0007A	Cleaning of Automatic Sample Bottles	20	NA	\$1.00	\$20.00
				TOTAL ITEM 1 -	\$32,077.50

# GENERAL DRINKING WATER QUALITY ANALYSIS

<u>0008</u>	<u>CATEGORY VIII</u> <u>ANALYSIS, DRINKING</u> <u>WATER</u>	Estimated Quantity	Analytical Method	Unit Price (each)	Total Price for Quantities
0008A	Nitrate	20	E353.2	\$5.00	\$100.00
0008B	Nitrite	10	A 4500 NO2 B	\$5.00	\$50.00
0008C	Turbidity	10	E1800.1	\$9.00	\$90.00
Subtotal					\$240.00
<u>0009</u>	<u>CATEGORY IX ANALYSIS, DRINKING WATER</u>				
0009A	Total Coliform Bacteria (if the sample tests positive for Total Coliform then the lab will continue the test to determine whether it is positive for fecal or E-coli bacteria)	65	A 9223 B	\$15.00	\$975.00
Subtotal					\$975.00
TOTAL ITEM 2 -					\$1215.00

# GENERAL SEDIMENT AND SOIL SAMPLE ANALYSIS

<u>0010</u>	<u>CATEGORY X</u> <u>ANALYSIS, SOIL AND</u> <u>SEDIMENT</u>	Estimated Quantity	Analytical Method (According to NCSS Standard Methods-❖)	Unit Price (each)	Total Price for Quantities
The mix of constituents selected for analysis will be identified by individual sample. State unit price of analysis for constituents individually in your RFP.					
0010A	pH	10	❖	\$4.00	\$40.00
0010B	Conductivity	10	❖	\$4.00	\$40.00
0010C	Sodium Exchange Potential	10	❖	\$15.00	\$150.00
0010D	Cation Exchange Capacity	10	❖	\$50.00	\$500.00
0010E	Texture (particle size analysis)	10	❖	\$5.00	\$50.00
0010F	Total Organic Carbon	10	❖	\$7.50	\$75.00
		10	❖	\$10.00	\$100.00
0010H	Sodium Adsorption Ratio (calculated*)	10	❖	\$15.00	\$150.00
		10	❖	\$4.00	\$40.00
		10	❖	\$4.00	\$40.00
		10	❖	\$4.00	\$40.00
		10	❖	\$4.00	\$40.00
0010M	Copper	10	❖	\$4.00	\$40.00
Subtotal					\$1305.00

TOTAL ITEM 3 - \$1305.00

Total for General Analysis=

# HIGH PRIORITY AND RUSH SAMPLES

## "HIGH PRIORITY" AMBIENT WATER QUALITY ANALYSIS

<u>0011</u>	<u>CATEGORY I ANALYSIS, DISSOLVED</u>	Estimated Quantity	Analytical Method	Unit Price (each)	Total Price for Quantities
0011A	Bicarbonate	5	A2320 B	-	
0011B	Carbonate	5	A2320 B	-	
0011C	Chloride	5	A4500 ClB-E200.7	\$7.00	\$35.00
0011D	Fluoride	5	A4500 F-C	\$4.50	\$22.50
0011E	Sulfate	5	A4500 SO4-E- E200.7	\$7.00	\$35.00
0011F	Calcium	5	E200.7	\$6.00	\$30.00
0011G	Magnesium	5	E200.7	\$6.00	\$30.00
0011H	Potassium	5	E200.7	\$6.00	\$30.00
0011I	Sodium	5	E200.7	\$6.00	\$30.00
0011J	Silica	5	E200.7	\$6.00	\$30.00
0011K	Calculated anion/cation balance	5	Calculation		
0011L	Conductivity	5	A2510 B	\$4.50	\$22.50
0011M	Total Dissolved Solids (Calculated)	5	Calculation	-	
0011N	Total Dissolved Solids, analyzed @180°C	5	A2540 C	\$11.50	\$57.50
0011O	Total Hardness as CaCO3	5	Calculation	-	
0011P	Total Alkalinity as CaCO3	5	A2320 B	\$4.50	\$22.50
0011Q	pH	5	A4500 H B	\$4.50	\$22.50
0011R	Sodium Absorption Ratio	5	Calculation	-	
Subtotal					\$367.50
<u>0012</u>	<u>CATEGORY II ANALYSIS</u>				
0012A	Total Suspended Sediment	5	E160.2	\$16.50	\$82.50
0012B	Total Dissolved Solids, analyzed @180°C	5	A2540 C	\$16.50	\$82.50
Subtotal					\$165.00
<u>0013</u>	<u>CATEGORY III ANALYSIS, DISSOLVED</u>				
0013A	Aluminum	5	E200.8	\$4.50	\$22.50
0013B	Arsenic	5	E200.8	\$4.50	\$22.50
0013C	Barium	5	E200.8	\$4.50	\$22.50
0013D	Boron	5	E200.7	\$4.50	\$22.50
0013E	Cadmium	5	E200.8	\$4.50	\$22.50
0013F	Chromium	5	E200.8	\$4.50	\$22.50
0013G	Lead	5	E200.8	\$4.50	\$22.50
0013H	Manganese	5	E200.8	\$4.50	\$22.50
0013I	Mercury	5	E200.8	\$4.50	\$22.50
0013J	Copper	5	E200.8	\$4.50	\$22.50
0013K	Iron	5	E200.7	\$4.50	\$22.50
0013L	Nickel	5	E200.8	\$4.50	\$22.50



0013M	Selenium	5	E200.8	\$4.50	\$22.50
0013N	Silver	5	E200.8	\$4.50	\$22.50
0013O	Zinc	5	E200.8	\$4.50	\$22.50
				Subtotal	\$337.50
0014	<u>CATEGORY IV ANALYSIS, TOTAL</u>				
0014A	Sample Digestion	2	E200.2	\$7.50	\$15.00
0014B	Aluminum	2	E200.8	\$4.50	\$9.00
0014C	Antimony	2	E200.8	\$4.50	\$9.00
0014D	Arsenic	2	E200.8	\$4.50	\$9.00
0014E	Barium	2	E200.8	\$4.50	\$9.00
0014F	Beryllium	2	E200.8	\$4.50	\$9.00
0014G	Cadmium	2	E200.8	\$4.50	\$9.00
0014H	Chromium	2	E200.8	\$4.50	\$9.00
0014I	Copper	2	E200.8	\$4.50	\$9.00
0014J	Cyanide	2	E335.3	\$22.50	\$45.00
0014K	Iron	2	E200.7	\$4.50	\$9.00
0014L	Lead	2	E200.8	\$4.50	\$9.00
0014M	Manganese	2	E200.8	\$4.50	\$9.00
0014N	Selenium	2	E200.8	\$4.50	\$9.00
0014O	Thallium	2	E200.8	\$4.50	\$9.00
				Subtotal	\$177.00
0015	<u>CATEGORY V ANALYSIS, NUTRIENTS</u>				
0015A	Nitrogen (ammonia)	5	A4500 NH3 H	\$7.50	\$37.50
0015B	Nitrogen (Kjeldhal)	5	A4500 N org	\$20.50	\$102.50
0015C	Nitrogen (nitrate and nitrite)	5	E353.2	\$7.50	\$37.50
0015D	Phosphorus (total)	5	E365.1	\$16.00	\$80.00
0015E	Phosphorus (ortho)	5	E365.1	\$16.00	\$80.00
				Subtotal	\$337.50
0016	<u>CATEGORY VI ANALYSIS, HYDROCARBONS</u>				
0016A	Oil and Grease (sulfur corrected)	1	E1664-Cu	\$36.00	\$36.00
0016B	Total Petroleum Hydrocarbons	1	E418.1	\$58.00	\$58.00
				Subtotal	\$94.00
Total for "HIGH PRIORITY" SAMPLES					\$1478.50

### "RUSH" DRINKING WATER QUALITY ANALYSIS

0017	<u>CATEGORY VIII ANALYSIS, DRINKING WATER</u>	Estimated Quantity	Analytical Method	Unit Price (each)	Total Price for Quantities
0017A	Nitrate	5	E353.2	\$10.00	\$50.00
0017B	Nitrite	5	A 4500 NO2 B	\$10.00	\$50.00
0017C	Turbidity	5	E1800.1	\$18.00	\$90.00
				Subtotal	\$190.00

<u>0018</u>	<u>CATEGORY IX ANALYSIS, DRINKING WATER</u>				
0018A	Total Coliform Bacteria (if the sample tests positive for Total Coliform then the lab will continue the test to determine whether it is positive for fecal or E-coli bacteria)	10	A 9223 B	\$22.50	\$225.00
Subtotal					\$225.00
TOTAL FOR "RUSH" SAMPLES					\$415.00

Grand Total for All Analysis = \$36,791.00